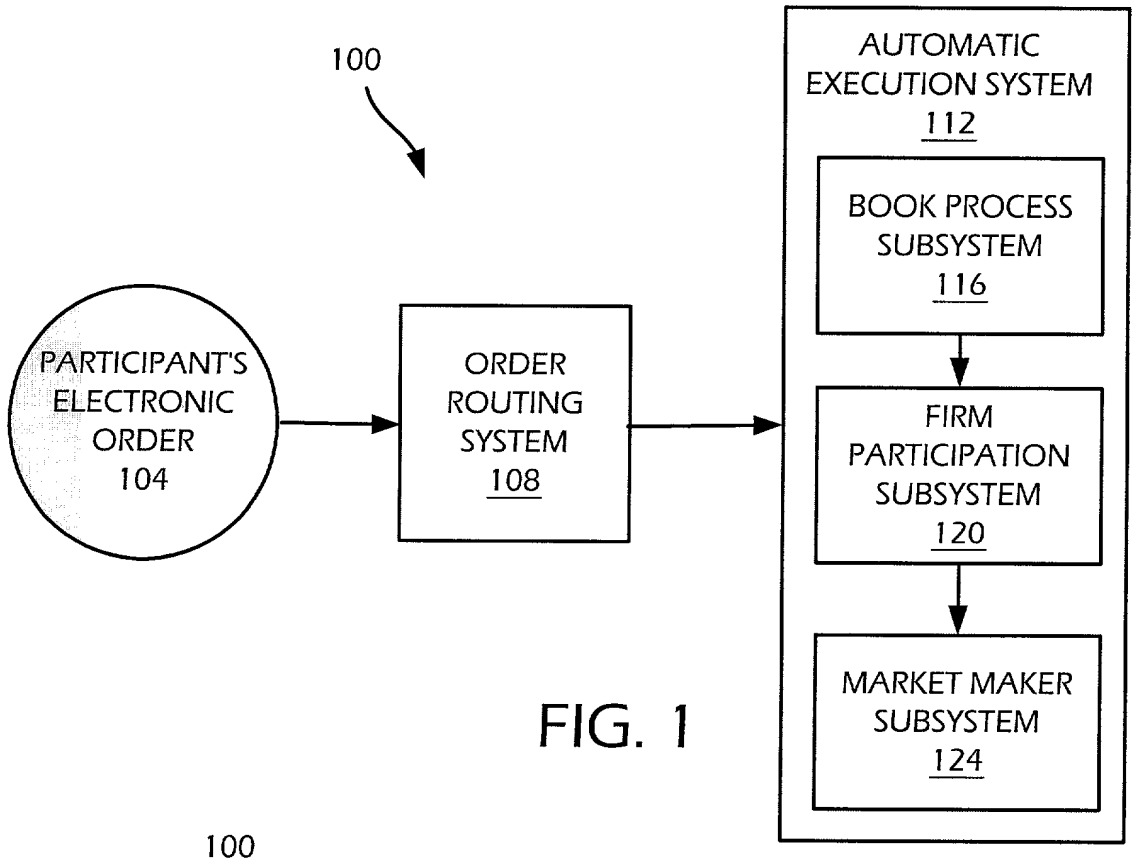
100
AUTOMATIC EXECUTION SYSTEM 112
BOOK PROCESS SUBSYSTEM 116
FIRM PARTICIPATION SUBSYSTEM 120
MARKET MAKER SUBSYSTEM 124
PARTICIPANT'S ELECTRONIC ORDER 104
ORDER ROUTING SYSTEM 108

FIG. 1

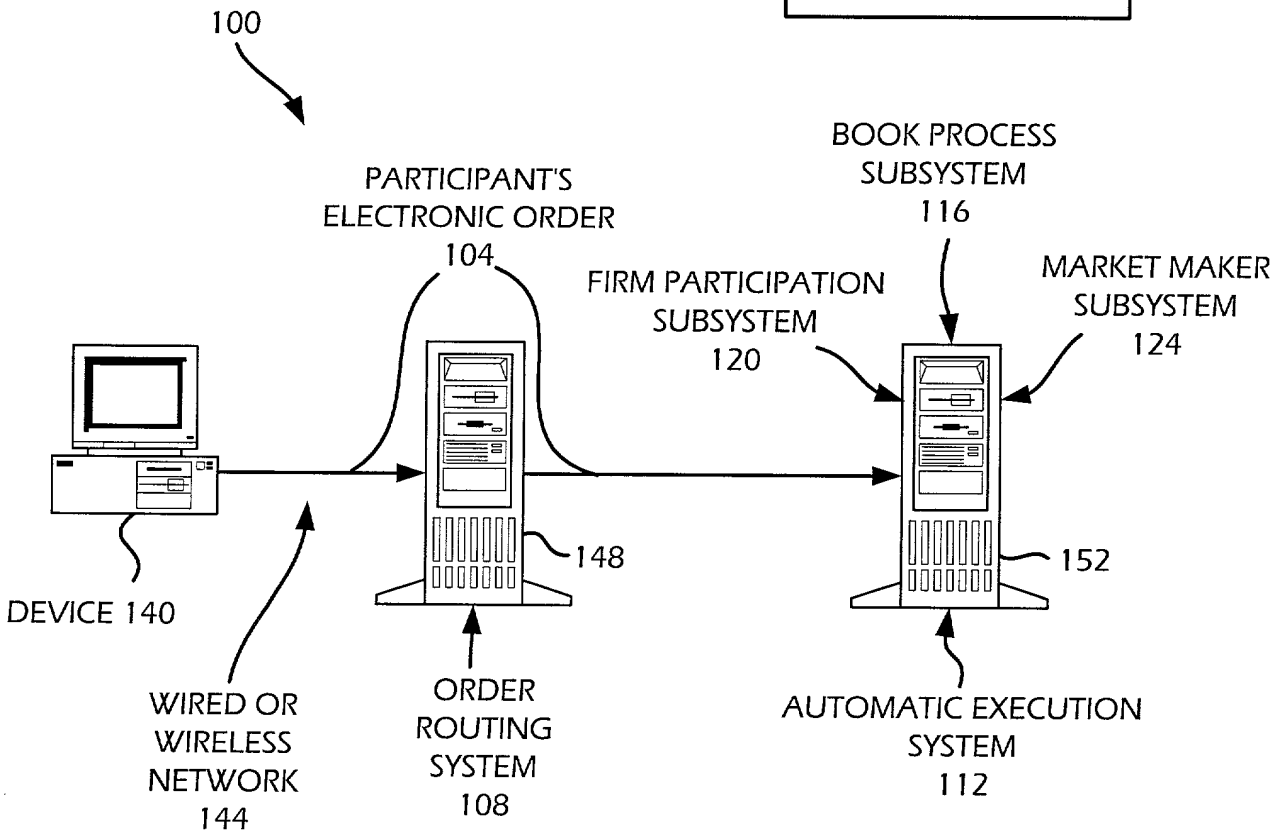
100
PARTICIPANT'S ELECTRONIC ORDER 104
BOOK PROCESS SUBSYSTEM 116
FIRM PARTICIPATION SUBSYSTEM 120
MARKET MAKER SUBSYSTEM 124
148
152
DEVICE 140
WIRED OR WIRELESS NETWORK 144
ORDER ROUTING SYSTEM 108
AUTOMATIC EXECUTION SYSTEM 112

FIG. 2

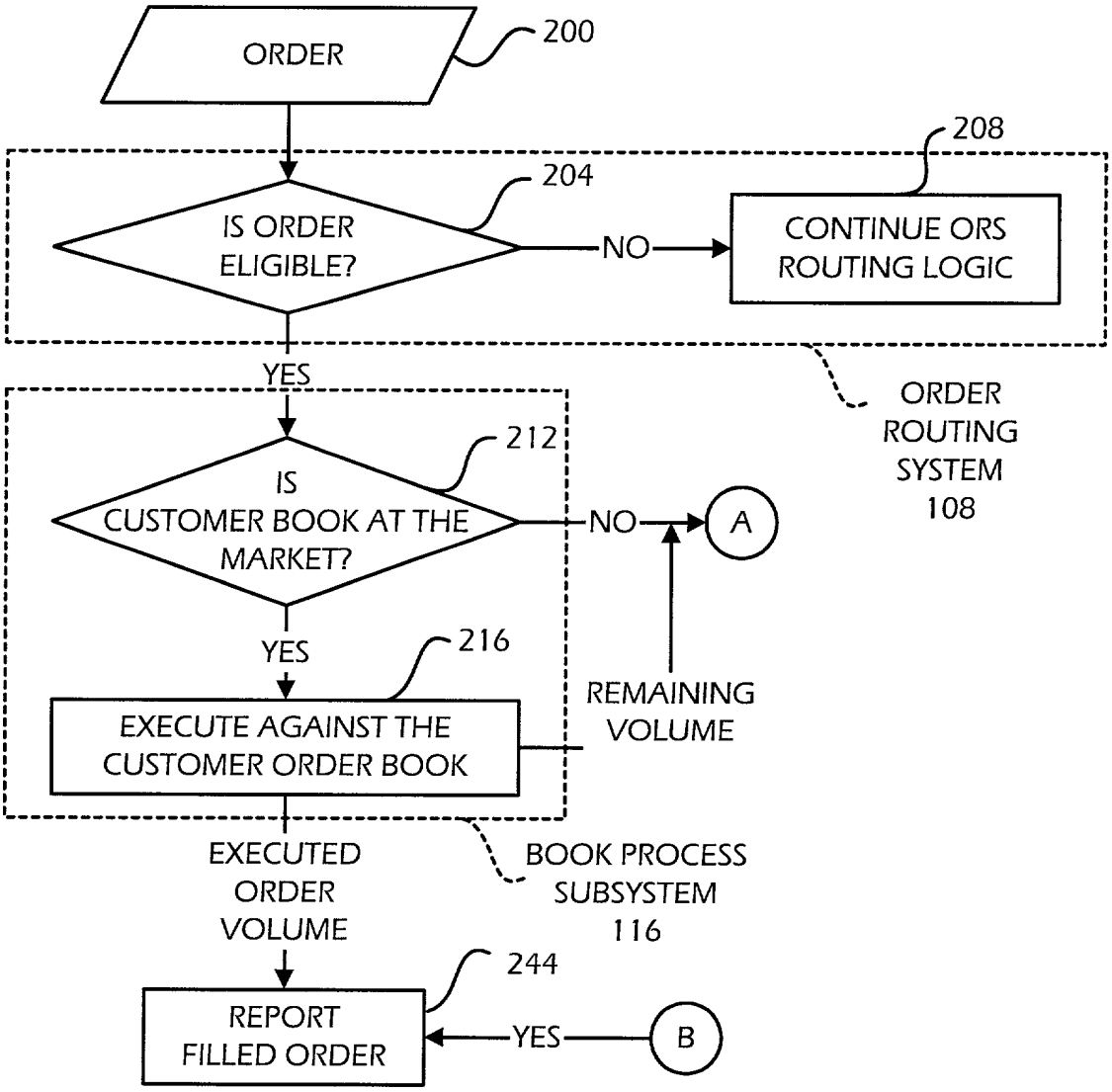
ORDER
200
208
204
IS ORDER ELIGIBLE?
NO
CONTINUE ORS ROUTING LOGIC
YES
ORDER ROUTING SYSTEM 108
212
IS CUSTOMER BOOK AT THE MARKET?
NO
A
YES
216
REMAINING VOLUME
EXECUTE AGAINST THE CUSTOMER ORDER BOOK
EXECUTED ORDER VOLUME
BOOK PROCESS SUBSYSTEM 116
244
REPORT FILLED ORDER
YES
B

FIG. 3A

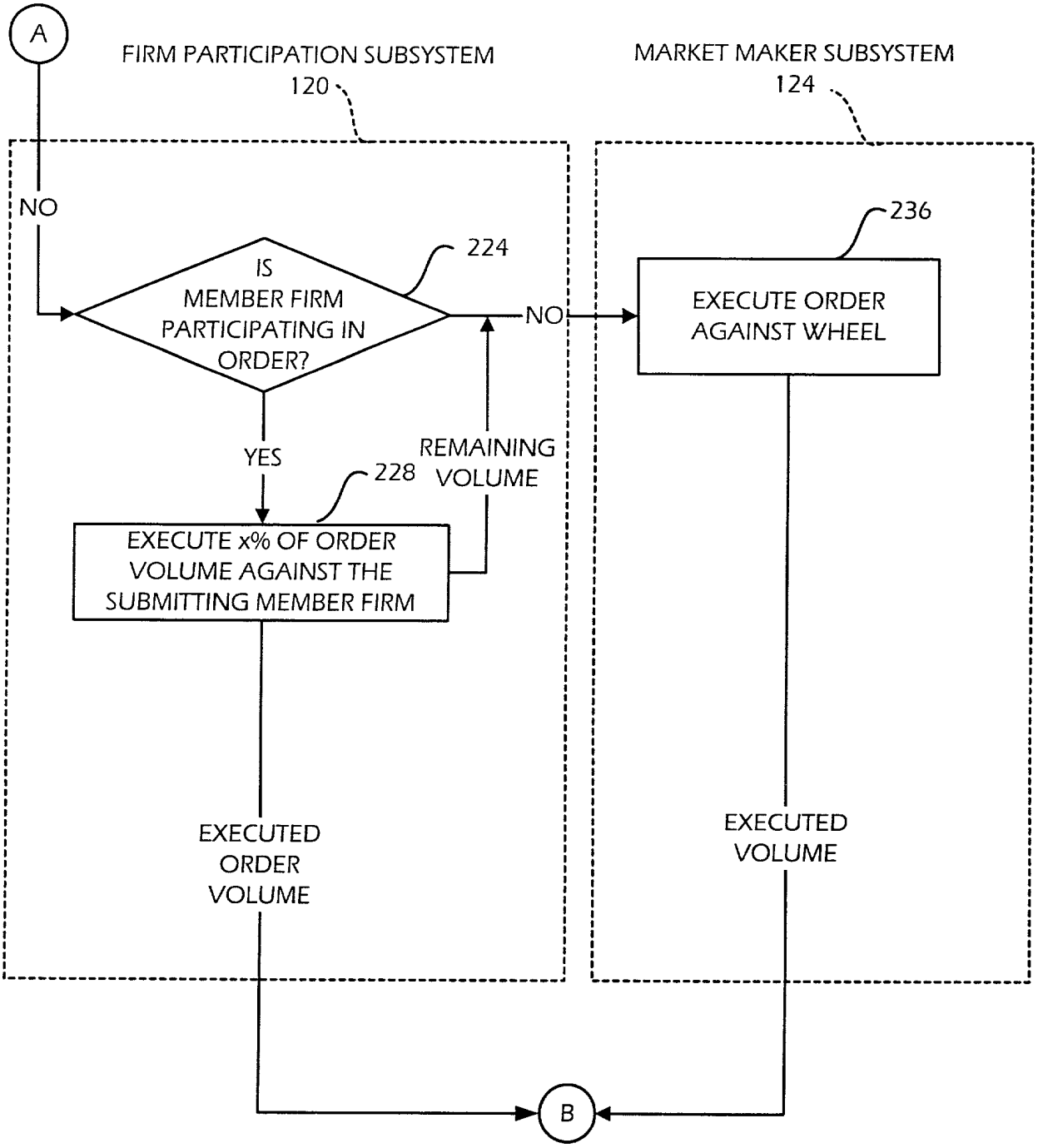
A
FIRM PARTICIPATION SUBSYSTEM
120
MARKET MAKER SUBSYSTEM
124
NO
IS MEMBER FIRM PARTICIPATING IN ORDER?
224
NO
236
EXECUTE ORDER AGAINST WHEEL
YES
REMAINING VOLUME
228
EXECUTE x% OF ORDER VOLUME AGAINST THE SUBMITTING MEMBER FIRM
EXECUTED ORDER VOLUME
EXECUTED VOLUME
B

FIG. 3B

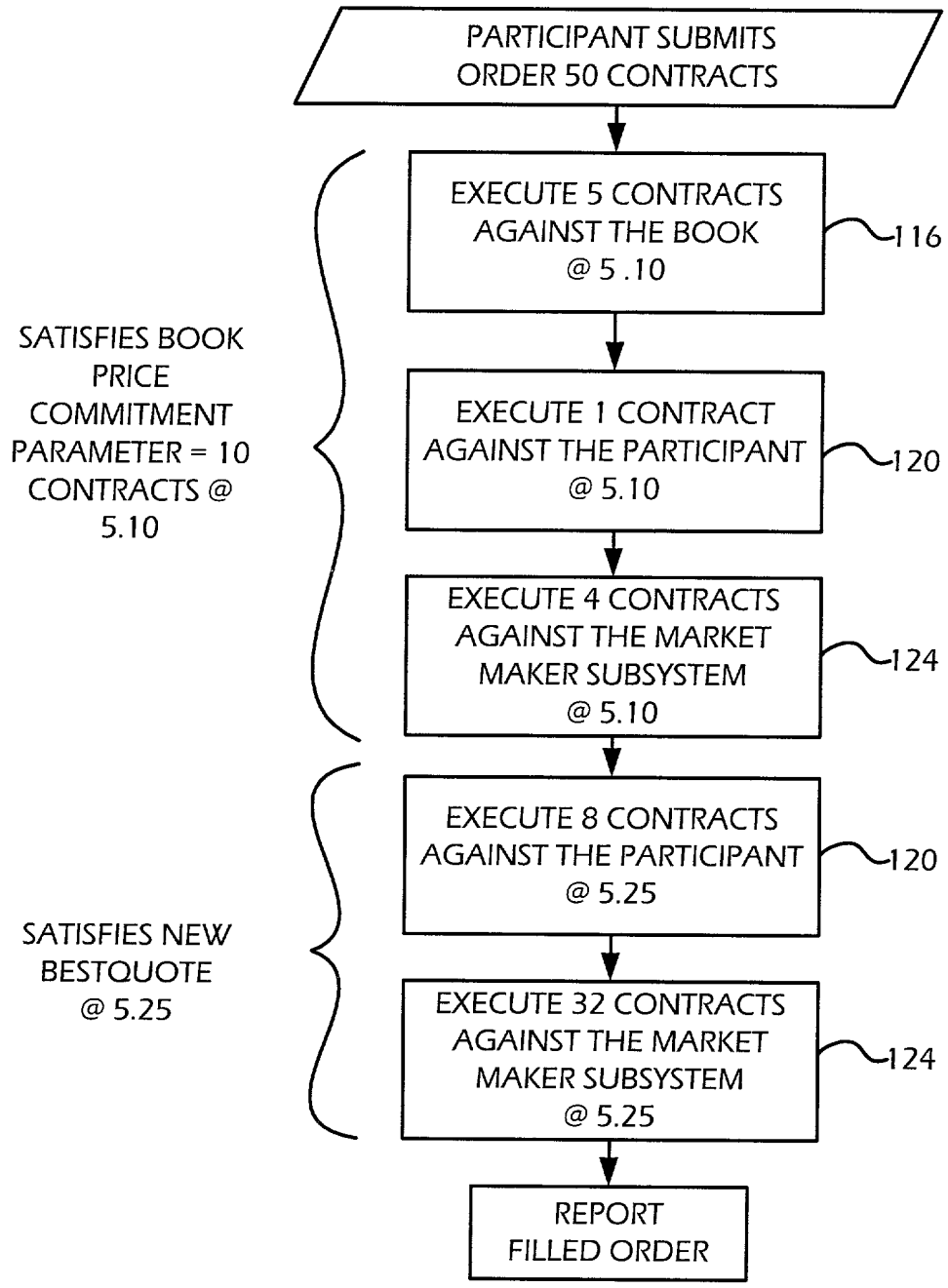
PARTICIPANT SUBMITS ORDER 50 CONTRACTS
EXECUTE 5 CONTRACTS AGAINST THE BOOK @ 5 .10
116
SATISFIES BOOK PRICE COMMITMENT PARAMETER = 10 CONTRACTS @ 5.10
EXECUTE 1 CONTRACT AGAINST THE PARTICIPANT @ 5.10
120
EXECUTE 4 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 5.10
124
EXECUTE 8 CONTRACTS AGAINST THE PARTICIPANT @ 5.25
120
SATISFIES NEW BESTQUOTE @ 5.25
EXECUTE 32 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 5.25
124
REPORT FILLED ORDER

FIG. 4

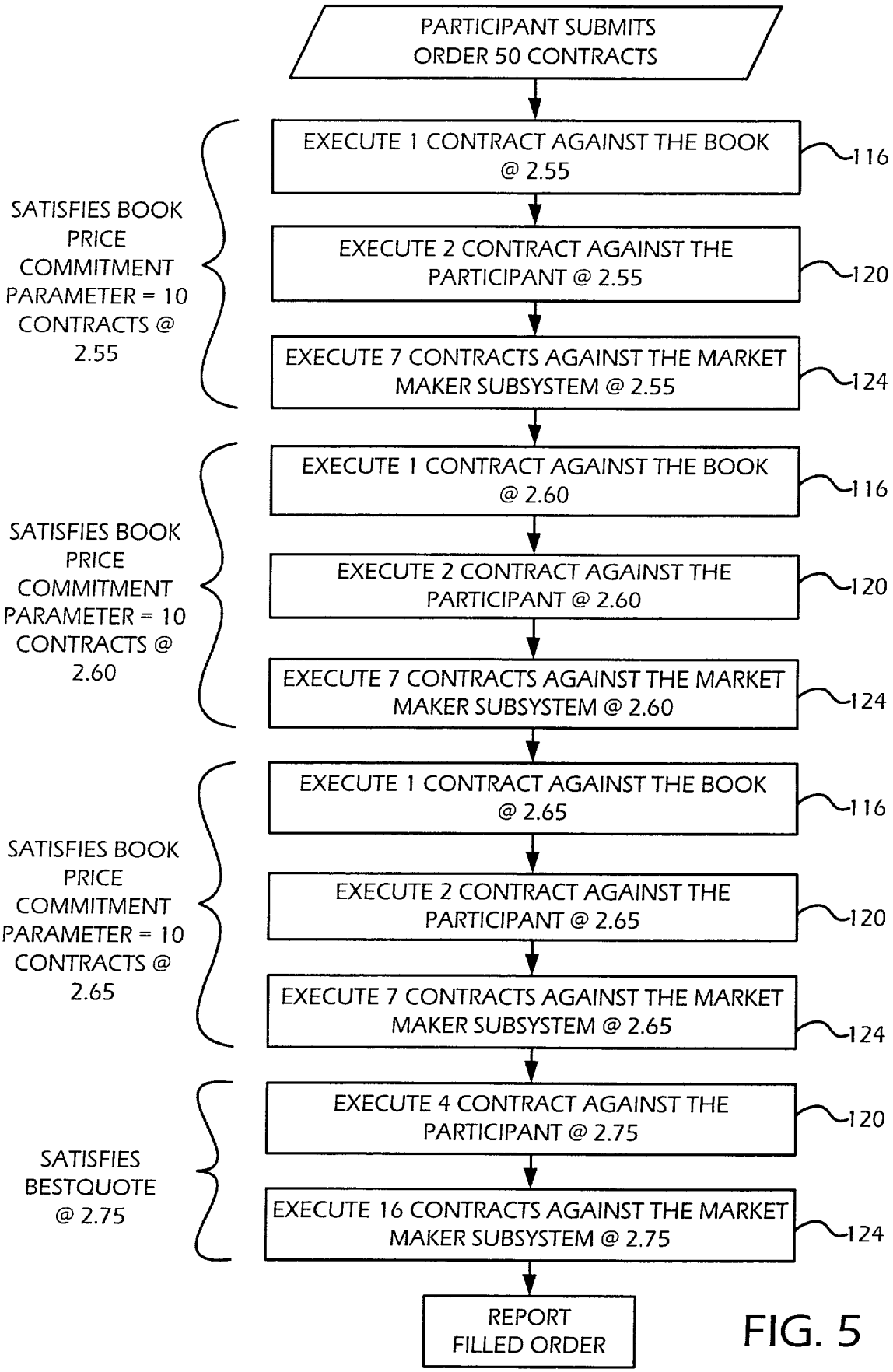
PARTICIPANT SUBMITS ORDER 50 CONTRACTS
EXECUTE 1 CONTRACT AGAINST THE BOOK @ 2.55
116
EXECUTE 2 CONTRACT AGAINST THE PARTICIPANT @ 2.55
120
EXECUTE 7 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 2.55
124
SATISFIES BOOK PRICE COMMITMENT PARAMETER = 10 CONTRACTS @ 2.55
EXECUTE 1 CONTRACT AGAINST THE BOOK @ 2.60
116
EXECUTE 2 CONTRACT AGAINST THE PARTICIPANT @ 2.60
120
EXECUTE 7 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 2.60
124
SATISFIES BOOK PRICE COMMITMENT PARAMETER = 10 CONTRACTS @ 2.60
EXECUTE 1 CONTRACT AGAINST THE BOOK @ 2.65
116
EXECUTE 2 CONTRACT AGAINST THE PARTICIPANT @ 2.65
120
EXECUTE 7 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 2.65
124
SATISFIES BOOK PRICE COMMITMENT PARAMETER = 10 CONTRACTS @ 2.65
EXECUTE 4 CONTRACT AGAINST THE PARTICIPANT @ 2.75
120
EXECUTE 16 CONTRACTS AGAINST THE MARKET MAKER SUBSYSTEM @ 2.75
124
SATISFIES BESTQUOTE @ 2.75
REPORT FILLED ORDER

FIG. 5

```
PME                                    PARAMETERS
  FIRM  z                                          BART ID  B008 ;  ELIG Y
  CLASS ABC      POST 06  STATION 05                BOOTH ROUTE ALL        N
  GLOBAL UPDATES       Y                           BOOK MKT VOL           00500
                                                   BOOK PRE-OPEN LMT VOL  00500
  FBR:  PRINTER  P099   PARM  C (C,D,N)            PRE-OPEN TIME          23 : 59
        PAR ID   W047   MKT VOL   00099            ETH VOLUME             00000
        BTM TO FBR  Y                              BOOK PRICE COMMITMENT  00000
  RAES: V1 00020 S +1   REJ DEST C (C,B,P)         SPRD PRINTER           P04E
        V2 00050 S *                             PRINTERS:       WIRE      BOOTH
  TTT:  EBOOK   N (A,E,L,N) PRINTER                 ORDER  C P06E P P06E   P06E
        PAR     Y           PRINTER P079            REPORT       P06E       *
  AFP:  PCT 000%
RANGE    DEV 1    VOL 1    DEV 2     VOL 2    FBR DEV   FBR VOL   SPRD VOL
  1       B        00099    B         00099    A         00099     00010
  2       B        00099    B         00099    A         00099     00010
  3       B        00099    B         00099    A         00099     00010
  4       B        00099    B         00099    A         00099     00010

PF12/24 - NEW SCREEN =>       PF4/16 - MODIFY      ENTER KEY - DISPLAY
PF2/14 - CONTINGENCY ROUTING  PF10/22 - GLOBAL     PF5/17 - ORIGIN ROUTING
```

FIG. 6

```
MAPRMZ    RAES AFP FIRM LOGIN     PLEASE ENTER ACR:                    10:55:05
                                  CLASS  SELECTION                     02/13/01

     CLASS ALLOC    CLASS ALLOC    CLASS ALLOC    CLASS ALLOC    CLASS ALLOC

   Z AIY    20 *  Z APA    20 *  Z AXA    20 *  Z BCU    20 *  Z CKV    20 *
   Z CWA    20 *  N DNA    20    N DWN    20    Z ESV    20 *  Z FBB    20 *
   Z HRC    20 *  N JPB    20    Z JSA   002 *  Z KCQ    20 *  Z KEI    20 *
   Z LYO    20 *  Z NBU    20 *  Z NI     20 *  Z OMC    20 *  Z OYJ   002 *
   Z PPP    20 *  Z PQP    20 *  Z RDC    50 *  Z REI    20 *  Z SAQ    20 *
   Z SJU    20 *  Z TUD    20 *  Z WCM    20 *  Z WGO    20 *  Z YAG    10 *
   Z YBG   002 *  Z YMB   002 *  _ _____ ___    _ _____ ___    _ _____ ___
   _ _____ ___    _ _____ ___    _ _____ ___    _ _____ ___    _ _____ ___


            "Z" LOGIN RAES              "N" EXCLUDE CLASS FROM LOGIN
      JUST PRESS PF3/15 (NO SELECTIONS) TO LOGIN ALL CLASSES INTO AFP/RAES

        PF3/15 - LOGIN          PF8/20 - FORWARD       PF12/24 - MAIN MENU
                                PF7/19 - BACKWARD            (NO UPDATE)
END OF LIST
```

FIG. 7

```
MAPRMZ          RAES AFP FIRM/BROKER LOGOUT          BROKER: ABC        13:30:09
                                CLASS SELECTION                          02/13/01

        CLASS          CLASS          CLASS          CLASS          CLASS

      N AIY          Z APA   *      Z AXA   *      Z BCU   *      Z CKV   *
      N CWA          B DNA   *      B DWN   *      Z ESV   *      Z FBB   *
      N HRC          B JPB   *      Z JSA   *      Z KCQ   *      Z KEI   *
      Z LYO   *      Z NBU   *      Z NI    *      Z OMC   *      Z OYJ   *
      Z PPP   *      Z PQP   *      Z RDC   *      Z REI   *      Z SAQ   *
      Z SJU   *      Z TUD   *      Z WCM   *      Z WGO   *      Z YAG   *
      Z YBG   *      Z YMB   *        _____          _____          _____
        _____          _____          _____          _____          _____

  ENTER AN "X" NEXT TO THE CLASS(ES) YOU WISH TO LOGOUT OF AND PRESS PF6/18.
        JUST PRESS PF6/18 (NO SELECTIONS) TO LOGOUT ALL CLASSES.


     PF6/18 - LOGOUT       PF8/20 - FORWARD          PF12/24 - MAIN MENU
                           PF7/19 - BACKWARD               (NO UPDATE)
END OF LIST
```

FIG. 8

US 6,535,894 B1